PRESENTER: Okay. Estimating social and economic effects. This is the real meat of the course. We're going to get into it here. This is the fun stuff.

Okay. Anybody seen this before? We want to put things in perspective again. As you can see from this schematic, we're marching through the planning steps. We're down to step 6 where all the other Resource Specialists are estimating the effects of the alternatives and so are the social scientist. So what kind of social science activities do we need? If you look in that right-hand column under step 6 we're going to identify the analysis methods that are available out there. We're going to really talk about a number of tools, how to analyze social and economic effects, how to document that analysis, the methods used. We're going to talk about using appendices and technical reports and assessing mitigation opportunities.

Now, relating to the last section we talked about, in a Resource Management Plan, what we try to do as much as possible when we come up with mitigation is go back and work that into an alternative so that you don't have a lot of mitigation hanging out there. Whenever possible, we try to work that into an alternative.

The objectives, we're going to try to talk about how to estimate the effects on the local economy. That's called the regional economic analysis and benefits-costs to resource users, economic efficiency, or benefit-cost analysis, and how to estimate the social effects, and how to improvise.

Social and Economic Aspects of Planning **Effects of Alternatives**

Economic Impact Assessment

So some of the tools in the toolbox... regional impact analysis. In other words,

input-output analysis. The one I like to talk about is IMPLAN. In fact, I'll put in a

little plug. I helped Dr. Susan Winter with the Forest Service. She is the principal

instructor of the IMPLAN FEAST class. Typically it's held in Fort Collins. It's

once or twice a year. So I've been helping her with that for the last two or three

years. So we've been fortunate. The agreement kind of was if I was willing to

help, she would open the class up to BLM people and we've been able to get a

number of BLM people through that class. I think there's two or three in this

class that probably have been through that.

CLASS PARTICIPANT: [inaudible]

PRESENTER: It's specific. It focuses on input-output analysis, IMPLAN and

FEAST. It's more technical. It's one of those classes where you walk away and

you have a much better idea of how it's done. It doesn't the broad overview that

you are getting here.

CLASS PARTICIPANT: [inaudible]

PRESENTER: Right. There's a follow-up, kind of a continuing learning session

every week or two. There will be an our or two-hour discussion where we talk

about different aspects of that IMPLAN and FEAST and we get on Michigan my

Meeting or one of those programs where everybody can view the screen and you

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can call in and we go through the analysis.

Anyway, so we'll talk a little bit about input-output analysis. Not market analysis. John will get in and talk some more about that. He's going to cover travel cost methods, contingent valuation methods. We're going to hear more about social impact analysis, public participation mechanisms, case studies, existing data from census bureaus. We're going to talk about field research and peer review among all the other things.

Impact assessment... the purpose of impact analysis is to assess the social and the economic consequences of implementing the various alternatives as identified in the planning process, 1601-1, that's the BLM planning handbook.

As I mentioned in the very early stages of this course, why do social and economic analysis? We want to have credible analysis. And far too often when we are reviewing, and I can speak regarding the economic analysis, when we're reviewing documents, RMP's, EIS's, EA's, if there's an economic analysis at all in there it's a generalization, and you see a conclusion with no support. You don't know what the basis for that conclusion is. So here we are. This is where we get into the impact analysis to provide some ideas on how to come up with those impacts and have a basis for those impacts.

So I'm going to turn this over to John Loomis who is going to give us some more exciting theory and talk about some methods.

PRESENTER: All set? I'm just going to introduce and remind you of the two techniques and Roy Allen is going to speak about measuring the regional economic effects with input-output and the multipliers, and then I'll talk about market and nonmarket valuation, particularly benefit-cost analysis. One thing when you're doing your prep plan and when you're laying out your time schedule, both regional economic analysis and the market and nonmarket benefit-cost analysis require that the Resource Specialist have completed their analysis of what the change in AUM's, board feet, tons of coal, acres leased. So those are inputs into our analysis, and in many cases the same inputs are used to drive both of these analysis. So in the case of recreation, wildlife, hunting and fishing, the same basic information drives both the regional economic analysis and drives the benefit-cost analysis, and you kind of see that in this diagram that you've seen before where, in fact, you know, we need information on visitor expenditures, whether it's OHV, hunter, angler, those sorts of things. That will flow, that expenditure information, will flow into what Roy is going to talk about doing the regional economic analysis. That's the benefits, if you will, to the local community. The benefits to the hunter, the angler, the off-highway vehicle user, that's the consumer surplus. So using a, for example, travel cost model, that I'll talk more in detail about, in some sense pull those pieces apart. But we need to know from the wildlife specialist how does the number of elk or deer or antelope or water fowl change? For wildlife viewing how does the abundance and diversity of birds available for viewing? With regard to if you're using the recreation opportunity spectrum, how much semi-primitive nonmotorized, how

much semi-primitive motorized recreationists there going to be? One alternative might be heavily motorized. One alternative might be heavily nonmotorized. It's not enough to say how many acres get allocated to semi-primitive motorized and semi-primitive nonmotorized. We need to know for both of these types of analysis how does the change in acres translate into the change in visitor days, using, even if it's a crude rule of thumb, look, you know, so many acres has this level of use, and so, you know, for every thousand acres we get 50 visitor days. Okay. Well, as you allocate different amounts of acres, let's use that. So if we take with the current management from the AMS and we say, well, look, let's divide the number of acres open to OHV by the number of visitor days of OHV, come up with the amount of visitor days per acre that's open, and then we collect the expenditure data, we get the consumer surplus data to do this next step. But sequence this. You can't do this next step of the socioeconomic until the Resource Specialist is done with theirs. So the Resource Specialists have to be done and then another month or two allocated for the social and economic analysis after the Resource Specialist is finished quantifying visitor days, you know, number of deer, number of elk, board feet of timber and so forth, and then at that point you can do -- you've got the key inputs, if you will, to do both the regional economic analysis as well as to do the benefit-cost analysis. So it's important to sequence those.